



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,710	03/08/2001	Michael P.C. Watts		7848
7590	10/04/2004		EXAMINER	
Michael P.C. Watts			GIANOLA, JOHN F	
1185 Los Trancos Road				
Portola Valley, CA 94028			ART UNIT	PAPER NUMBER

2135

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
09/802,710	WATTS, MICHAEL P.C.	
Examiner	Art Unit	
John F Gianola	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03/08/2001.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-24 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
10) The drawing(s) filed on 08 March 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/08/2004.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. In June 2004, the USPTO ceased mailing paper copies of cited U.S. patents and U.S. patent application publications with all Office actions. See "USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies," 1282 O.G. 109 (May 18, 2004). Foreign patent documents and non-patent literature will continue to be provided to the applicant on paper.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3-7, 10, 11, 16, 17, 20, 21, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "said switch box" in line 5. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 3 recites the limitations "said switch box" and "said node" in line 1.

There is insufficient antecedent basis for these limitations in the claim.

6. Claim 5 recites the limitations "said switch box" in line 1 and "said node" in line 2. There is insufficient antecedent basis for these limitations in the claim.

7. Claim 6 recites the limitation "said node" in line 2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 7 recites the limitation "said private network" in line 1. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 10 recites the limitation "said node" in line 3. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 10 recites the limitation "the electrical signal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 11 recites the limitation "the node" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2135

12. Claim 20 recites the limitations "received security information" in line 1, "said switch" in line 2, and "said node supplying information supplies" in line 2. There is insufficient antecedent basis for these limitations in the claim.

13. Claim 21 recites the limitation "said routers" in lines 3 and 5. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 24 recites the limitation "said plurality of networks" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 1-14, 16, 17, 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Nessel et. al. (US Pat. No. 5,968,176).

17. Referring to claims 1 and 6:

Nesset et. al. disclose a network apparatus comprising:

A.) a plurality of private networks with routers to external networks (see Figure 2; Column 10, lines 28-31 and lines 47-55);
and

B.) a plurality of switch boxes connecting said private networks to a plurality of network enabled nodes (see Figure 2 and Column 10, lines 53-58);
and

C.) said switch box comprising a switch that controls which of said private networks is connected to said plurality of nodes (see Column 12, lines 56 –65).

18. As to Claim 2:

Nesset et. al. disclose the limitations of claim 1 above and further disclose:

D.) said switch is controlled by one of said private networks (see Column 6, line 64 to Column 7, line 12).

19. Referring to Claim 3:

Nesset et. al. disclose the limitations of claim 1 above and further teach a filtering mechanism in a Network Interface Card (NIC) that, by effectively dropping packets from one source and allowing packets from another, function as a switch between two or more networks and thereby disclose

E.) wherein said switch box is built into said node (see Column 11, lines 54-56).

20. Referring to Claim 4:

Nesset et. al. disclose the limitations of claim 1 above, and further disclose:

F.) wherein said plurality of switch boxes are built into a hub used to connect a plurality of nodes (see Column 12, lines 57-65 and Column 10, lines 47-49).

21. Referring to Claim 5:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

G.) wherein said switch box is located between a hub used to connect a plurality of nodes and the said node (see Figure 2, and Column 10, lines 47-57).

22. Referring to Claim 7:

Nesset et. al. disclose the limitations of claims 1 and 2 above, Nesset et. al. further disclose:

H.) said private network that controls switch comprises a node that controls switch (see Column 6, line 64 to Column 7, line 21).

23. Referring to Claim 8:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

I.) wherein said switch box additionally comprises a firewall (see Column 11, lines 54-62 and Column 13, lines 10-12).

24. Referring to Claim 9:

Nesset et. al. disclose the limitations of claim 1 and claim 8 above, Nesset et. al. further disclose:

J.) wherein said switch box additionally comprises memory readable by said firewall (see Column 13, lines 42-49).

25. With respect to Claim 10:

Nesset et. al. disclose the limitations of claim 1, claim 8, and claim 9 above, Nesset et. al. further disclose:

K.) said switch box comprises a memory writer control that comprises an AND function with the electrical signal that enables said switch to connect said controlling network to said node (see Column 13, lines 46-49).

26. Referring to Claim 11:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

L.) wherein said switch box comprises connection with a plurality of electrical signals within the node (see Column 11, lines 25-31 and lines 54-62).

27. With regards to Claim 12:

Nesset et. al. disclose the limitations of claim 1, claim 2, claim 7, and claim 12 above, Nesset et. al. further disclose:

M.) wherein said plurality of private networks comprises a node for recording logging information (see Column 16, lines 43 –54).

28. Referring to Claim 13:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

N.) wherein the plurality of private networks operate on a plurality of media (see Column 13, line 50 to Column 14, line 18).

29. Referring to Claim 14:

Nesset et. al. disclose the limitations of claim 1 and claim 13 above, Nesset et. al. further disclose:

O.) wherein said plurality of media comprises different protocols operating over said plurality of private networks (see Column 13, line 65 to Column 14, line 7).

30. With respect to Claim 16:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

Q.) wherein said plurality of nodes essentially only receive data and are connected to said plurality networks simultaneously (see Column 11, lines 24-30).

31. Referring to Claim 17:

Nesset et. al. disclose the limitations of claim 1 above, Nesset et. al. further disclose:

R.) wherein said plurality of nodes essentially only send data and are connected to said plurality networks simultaneously (see Column 11, lines 24-30).

32. With regards to Claim 22:

Nesset et. al. disclose:

S.) a means for connecting a plurality of public network connected private networks to a plurality of nodes; and a means for switching on of said private networks to one or more of said nodes; and a means for checking data packets passing from said public network to said nodes (see Figure 2; Column 10, lines 29-31 and lines 47-59; and Column 11, lines 54-56).

33. Referring to Claim 23:

Nesset et. al. disclose:

T.) a plurality of private networks with routers to external networks (see Figure 2 and Column 10, lines 28-31 and lines 47-55); and

U.) a plurality of switch boxes connecting said private networks to a plurality of network enabled nodes (see Figure 2 and Column 10, lines 53-58); and

V.) said switch box comprising a switch that determines which network is connected to which nodes (see Column 12, lines 56 –65) ; and

W.) said switch controlled by a computer on one of said plurality of networks (see Column 6, line 64 to Column 7, line 21); and

X.) said switch box comprising a firewall (see Column 11, lines 54-62 and Column 13, lines 10-12); and

Y.) said switch box comprising memory read by said firewall (see Column 13, lines 42-49); and

Z.) said memory written by said switch controlling computer (see Column 13, lines 42-49).

34. Referring to Claim 24:

Nesset et. al. disclose the limitations of claim 23 above, Nesset et. al. further disclose:

A2.) said plurality of networks operating over a single media using a plurality of network protocols (see Column 13, lines 56-59 and line 64 to Column 14, line 3).

35. Claims 18, 19, 20, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Erwin et. al. (Erwin et. al. *Virtual Private Networks*. 2nd ed. Sebastopol, CA: O'Reilly and Associates, 1999).

36. Referring to Claim 18:

Erwin et. al. disclose :

B2.) notifying a node on a first private network of the need to access a plurality of nodes from a node on a public network (see section 4.2.1 "Dialing into an ISP that Supports PPTP");

and

C2.) said notified node supplying security information about said plurality of nodes to said public node; and

 said notified node supplying security information about said public node to said plurality of nodes (see section 4.2.1 "Dialing into an ISP that Supports PPTP," as well as section 4.1 "Differences Between PPTP, L2F, and L2TP" for a brief discussion on security and authentication in VPNs and PPTP) ;

D2.) said notified node switching said plurality of nodes to a second private network; and said public node sending and receiving information with said plurality of nodes; and said notified node switching said plurality of nodes to said first private network (see 4.2.1 "Dialing into an ISP that Supports PPTP").

37. With regards to Claim 19:

Erwin et. al. disclose:

E2.) Wherein said plurality of nodes send security information to said public node after switch has been changed to said second private network (see section 4.2.1 "Dialing into an ISP that Supports PPTP," as well as section 4.1 "Differences Between PPTP, L2F, and L2TP" for a brief discussion on security and authentication in VPNs and PPTP).

38. With regards to Claim 20, Erwin et. al. disclose:

F2.) wherein said sent and received security information passes through a firewall in said switch and said node supplying information supplies firewall check list to firewall readable memory (see 4.2.1 "Dialing into an ISP that Supports PPTP").

39. With regards to Claim 21, Erwin et. al. disclose:

G2.) sending and receiving information at said routers with a plurality of protocols (see 4.2 "How PPTP Works"); and

H2.) passing information between said routers and said nodes over a single media (see 4.1 "Differences Between PPTP, L2F, and L2TP"); and

I2.) Sending and receiving information at said nodes with a plurality of protocols (see 4.2 "How PPTP Works").

Claim Rejections - 35 USC § 103

40. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

41. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

42. Claim 15¹⁵ rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Nessett et. al. and Collins (US Pat. No. 5,671,355) as applied to claim 15 above.

Nessett et. al. disclose a network apparatus comprising:

J2.) a plurality of private networks with routers to external networks (see Figure 2; Column 10, lines 28-31 and lines 47-55);
and
K2.) a plurality of switch boxes connecting said private networks to a plurality of network enabled nodes (see Figure 2 and Column 10, lines 53-58);
and

L2.) said switch box comprising a switch that controls which of said private networks is connected to said plurality of nodes (see Column 12, lines 56 –65).

43. Nessett et. al. fail to specifically disclose a switch box that is reconfigurable to support different protocols. However, Collins discloses:

M2.) a network transceiver that is reconfigure to support different protocols (see Collins: Column 9, line 48 to Column 10, line 3);

44. It would have obvious to one of ordinary skill in the artat the time the invention was made to implement Nessett et. al. disclosed plurality of networks and switch boxes using Collins reconfigurable transceiver in order to have different protocols on the plurality of networks and have switch boxes capable of switching between these networks (see Collins: Column 1, lines 43-60).

Conclusion

45. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Wong et. al. "Method and Apparatus for Controlling Access to Services within a Computer Network" (US Pat. No. 5,835,727), Radia et. al. "Method and Apparatus for Dynamic Packet Filter Assignment" (US Pat. No. 5,848,233), and the Alliance Datacom sale's sheet for the Ascend MAX 4000 (equipment mentioned in Erwin et al) available at <http://www.alliancedatacom.com/products/ascend/ascend_line_4000.asp> .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F Gianola whose telephone number is (703) 605-4321. The examiner can normally be reached on Mon - Fri (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

In October of 2004, Technology Center 2100 will be relocating to the US Patent and Trademark Office's facility in Alexandria, VA. After that date, calls to John F Gianola should be directed to (571) 272-3848. Likewise, the telephone number for Technology Center 2100 will change to (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KIM VU
PATENT EXAMINER
TECHNOLOGY CENTER 2100